



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2000271428 A**(43) Date of publication of application: **03.10.00**

(51) Int. Cl.

**B01D 53/34****B01D 53/94****B01J 23/63****B01J 23/58****F01N 3/08****F01N 3/10****F01N 3/24****F01N 3/28****F02D 41/04**(21) Application number: **11079758**(71) Applicant: **TOYOTA MOTOR CORP**(22) Date of filing: **24.03.99**(72) Inventor: **TANIZAWA RIEMI****(54) EXHAUST GAS CLEANING CATALYST AND  
EXHAUST GAS CLEANING METHOD****(57) Abstract:**

PROBLEM TO BE SOLVED: To improve durability by carrying a noble metal selected from Pt, Pd and Rh, Ir and a NOx occluding element selected from alkali metals, alkaline earth metals and rare earth elements on a carrier composed of a porous oxide to suppress the poisoning of the NOx occluding element.

SOLUTION: In an exhaust gas cleaning catalyst for reducing and cleaning NOx, the carrier composed of the porous oxide is provided and at least one kind

of noble metal selected from Pt, Pd and Rh is carried on the carrier. Ir is carried in addition to these noble metals. Because Ir exhibits high reduction activity and is more excellent in heat resistance than Pt, Pd and Rh, SOx released from the NOx occluding element poisoned by sulfur in an enriched atmosphere is reduced and cleaned by carrying Ir to restore the NOx occluding capacity of the NOx occluding element. In addition, at least one kind of the NOx occluding element selected from the alkali metals, the alkaline earth metals and the rare earth metals is carried.

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